

## BEST EVIDENCE TOPIC REPORTS

# Towards evidence based emergency medicine: best BETs from the Manchester Royal Infirmary

Edited by K Mackway-Jones

Best evidence topic reports (BETs) summarise the evidence pertaining to particular clinical questions. They are not systematic reviews, but rather contain the best (highest level) evidence that can be practically obtained by busy practising clinicians. The search strategies used to find the best evidence are reported in detail in order to allow clinicians to update searches whenever necessary.

The BETs published below were first reported at the Critical Appraisal Journal Club at the Manchester Royal Infirmary.<sup>1</sup> Each BET has been constructed in the four stages that have been described elsewhere.<sup>2</sup> The BETs shown here together with those published previously and those currently under construction can be seen at <http://www.bestbets.org>.<sup>3</sup> Six topics are covered in this issue of the journal:

- Vomiting and serious head injury in children
- Low molecular weight heparin or unfractionated heparin in the treatment of patients with uncomplicated deep vein thrombosis
- Outpatient treatment for patients with uncomplicated above knee deep vein thrombosis
- SimpliRed D-dimer assay in suspected pulmonary embolus
- Elastic compression stockings and the risk of post-thrombotic syndrome in patients with symptomatic proximal vein thrombosis
- Prior injection of local anaesthetic and the pain and success of intravenous cannulation

1 Carley SD, Mackway-Jones K, Jones A, *et al*. Moving towards evidence based emergency medicine: use of a structured critical appraisal journal club. *J Accid Emerg Med* 1998;15:220-2.

2 Mackway-Jones K, Carley SD, Morton RJ, *et al*. The best evidence topic report: a modified CAT for summarising the available evidence in emergency medicine. *J Accid Emerg Med* 1998;15:222-6.

3 Mackway-Jones K, Carley SD. [bestbets.org](http://www.bestbets.org): Odds on favourite for evidence in emergency medicine reaches the worldwide web. *J Accid Emerg Med* 2000;17:235-6.

### Vomiting and serious head injury in children

Report by Jim Barnard, *Senior House Officer*  
Search checked by Simon Carley, *Specialist Registrar*

#### Clinical scenario

A 4 year old boy presents to the emergency department after a one metre fall onto a carpeted floor. The child has vomited three times in the past hour but is otherwise well. Clinical examination is unremarkable. You wonder how significant the vomiting is.

#### Three part question

In [a child with a minor head injury] does [vomiting] predict [intracranial injury]?

#### Search strategy

Medline 1966-07/00 using the OVID interface. ([exp brain injury OR exp craniocerebral trauma OR exp haematoma, epidural OR exp haematoma, subdural OR intracranial hae-

matoma.mp OR head injury.mp.] AND [exp vomiting OR vomiting.mp. OR emesis.mp.] AND [child OR pediatrics OR paediatric\$.mp. OR paediatric\$.mp)] LIMIT to human AND English AND abstracts.

#### Search outcome

Altogether 53 papers were found of which 41 were irrelevant to the question or of insufficient quality for inclusion. The remaining 13 papers are shown in table 1. An additional paper of relevance was recently published in this journal, but was not currently indexed on Medline.

#### Comments

The papers listed in table 1 give varied opinions on the significance of vomiting following paediatric head injury, and it is difficult to draw firm conclusions. Some of the studies combine paediatric and adult cases, this is likely to lead to some bias in the reported significance of vomiting. Distinction should be

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